

CLAIMS

Claim 1: (cancelled).

2. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1 further comprises~~ user input means permitting said user to rotate said interface about a plurality of axes, and at least one of a rotational constraint means and a control means for controlling the rotation of said interface.

Claims 3-13: (cancelled).

14. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

The interface of claim 4 and wherein said user interface is projected onto a two-dimensional display.

Claim 15: (cancelled).

16. (previously amended): A computer device for displaying a three dimensional user interface, said device comprising means for displaying the interface as claimed in claim 14.

Claims 17-25: (cancelled).

26. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user The interface of ~~claim 1~~ further comprisesing means for selecting a portal to be made active from said plurality of portals, wherein the portal to be selected is closest to a pre-determined reference point.

27. (original): The interface of claim 26 wherein said selected portal is positioned proximate the middle of a screen and substantially upright.

28. (previously amended): The interface of claim 2, said rotational constraint means for preventing said interface from rotating to an upside-down position.

29. (previously amended): The interface of claim 2, said rotational constraint means for preventing said interface from rotating about at least one first axis while permitting rotation of the interface about at least one second axis.

30. (previously amended): The interface of claim 2, said rotational constraint means for preventing said interface from rotating at a rate greater than a pre-determined maximum rotation rate.

31. (previously amended): The interface of claim 2, said rotational constraint means for reversing the current direction of rotation of said interface when said interface is rotating.

32. (previously amended): The interface of claim 2, said control means for controlling the speed of rotation of said interface, wherein the speed of rotation of said interface depends on the position of a cursor relative to an edge of said interface.

33. (previously amended): The interface of claim 2, said control means for controlling the direction of rotation of said interface, wherein the direction of rotation of said interface depends on the position of a cursor relative to a point on said interface.

34. (original): The interface of claim 33 wherein said point is located at the centre of said interface.

35. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1 further comprises~~ing means for recording a plurality of interactions and subsequently executing said recorded interactions on said interface.

36. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

~~The user interface of claim 1, and~~ wherein said graphic representation is in the form of a sphere, wherein said sphere includes polar caps, and wherein said polar caps are used to view a subset of data represented in said interface.

Claim 37: (cancelled).

38. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user

interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1~~ further comprises means for navigating the interface using a text-based index, wherein elements of said index are associated with said plurality of portals.

39. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1~~ further comprises means for transmitting data to and receiving data from at least one other remotely-located interface through a network connection.

40. (original): The interface of claim 39 wherein said interface is used to control the operation of said at least one remotely-located interface.

41. (original): The interface of claim 39 wherein the operation of said interface is controlled by said at least one remotely-located interface.

42. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1 further comprises~~ means for importing data into said interface from a data source, said data being represented in said data source in a hierarchical format.

43. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user

interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1~~ further comprisesing means for enabling objects to be moved between portals of said interface.

44. (original): The interface of claim 43 wherein objects can be dragged from one of said plurality of portals to another of said plurality of portals.

45. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1~~ further comprisesing means for enabling objects to be dragged from an application to one of said plurality of portals.

46. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and ~~The interface of claim 1~~ wherein said interface is displayed in a window having substantially the same shape as a cross-section of said interface.

47. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 1~~ further comprisesing update means for updating content in at least one remotely-located portal when content in a portal of said interface is changed.

48. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

and wherein said user ~~The interface of claim 4~~ further comprising update means for updating content in at least one remote interfaces when content in said interface is changed.

49. (currently amended): A user interface for a computing device, said interface comprising:

a) a plurality of portals containing content, wherein said plurality of portals are arranged in a three dimensional graphical representation for display to a user, and wherein for each of said plurality of portals, an application that permits user interaction with the content contained therein is associated therewith; and

b) a plurality of sensory cues, wherein for each of said plurality of portals, a sensory cue is displayed therein that provides a cue to the content contained therein;

wherein said user interface is adapted to change, based on the content contained in one or more portals of the user interface, one or more geometric properties thereof dynamically, so that the graphical representation displayed to said user is changed, and said changes comprise changes to at least one of the shape of the user interface, the shape of one or more portals of the user interface, and the arrangement of portals of the user interface;

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and wherein said user ~~The interface of claim 4~~ further comprisesing means to search for a web page contained in one of said plurality of portals corresponding to a user-designated web address, and to display said web page to said user.